SMALLANTHUS PUTLANUS (ASTERACEAE: HELIANTHEAE), A NEW SPECIES FROM OAXACA, MEXICO

Billie L. Turner

Plant Resources Center The university of Texas Austin, TX 78712 billie@uts.cc.utexas.edu

ABSTRACT

A new species, **Smallanthus putlanus** B.L. Turner, is described from westernmost Oaxaca. It is seemingly most closely similar to *S. macvaughii* of Jalisco but can be recognized by several features. A photograph of the type specimen is provided, along with maps showing the distribution of the Mexican taxa of *Smallanthus*. *Phytologia* 92(3): 358-361 (December 1, 2010).

KEY WORDS: Asteraceae, Heliantheae, *Smallanthus*, Oaxaca, Mexico

Routine identification of Mexican Asteraceae has revealed the following novelty:

/ SMALLANTHUS PUTLANUS B.L. Turner, sp. nov. Fig. 1 Smallantho macvaughii (J. Wells) H. Rob. similis sed differt statura minore (0.5–1.5 m in altitudine vs 2–5 m), bracteis exterior involucralibus minoribus 5–8 mm in longitudine sparsim glandularibus non reflexis (vs 10–20 mm in longitudine dense glandularibus reflexis), et flosculis radii 10–12 (vs. 8).

TYPE: MEXICO. OAXACA: Distrito Putla, Mpio. Santa Cruz Itundujia, "a 0.5 km en LR (W) se la Agencia de la Victoria Bosque de pino-encino secundario." ca 1091 m, 16 44.7 N, 97 45 36 W, 2 Aug 2008, *K. V. Gutierrez 3099*. [con M Trujillo y H. Cruz] (Holotype: TEX). **Perennial herbs**, 0.5-1.5 m high. **Stems** villous, arising from woody, corm-like structures, out of which are produced lateral ligneous rootstocks with villous hairs. **Leaves** thin, opposite, 25-30 cm long, 12-14 cm wide; lower surfaces of blades glabrous, hastately to pinnately lobed, the margins finely ciliate; petioles 5-6 cm long, winged throughout, ca 1 cm wide, auriculate at base. **Capitulescence** a terminal, 2-headed raceme, the ultimate peduncles glandular-pubescent, 3-4 cm long. **Heads** ca 3 cm across the extended rays; chaff scarious, linear-lanceolate, slightly shorter than the disk florets. **Outer involucral bracts** 5, narrowly ovate, 5-8 mm long, 2-4 mm wide. **Ray florets**10-12, pistillate, fertile, the ligules yellow, villous at the very base. **Disk florets** sterile (?), 30-40, yellow, sparsely pubescent. **Achenes** of ray florets fertile, ovoid or tear-shaped, glabrous.

Leaf texture and pubescence of *S. putlanus* is especially like that of *S. macvaughii*. When first discerned, I took the present novelty to be a species of the small, mostly herbaceous, genus *Axiniphyllum* (Turner 1978), largely because the type itself was only ca 0.5 cm high. The label data, however, give its height as 1.5 m, more like that of a *Rumfordia*, or *Smallanthus*. In my evaluation of its generic position, the defining characters for *S. putlanus*, were the seemingly rounded, or tear shaped, ray achenes and sterile disk florets, instead of 4-sided and fertile, as found in *Axiniphyllum*, and *Rumfordia*.

Geographically speaking, *Smallanthus putlanus* might also be compared with *S. oaxacanus* (Sch.-Bip.) ex Klatt) H. Rob., an orangerayed shrubby species of more eastern Oaxaca (Turner 1988). The distribution of the Mexican species of *Smallanthus* is shown in Figs 2-3.

The name is derived from the Distrito de Putla, Oax, whence the type.

ACKNOWLEDGEMENTS

As always, I am grateful to my colleague, Guy Nesom, for the Latin diagnosis, and helpful suggestions on the manuscript itself. Maps are based upon specimens on file at LL-TEX.

LITERATURE CITED

Turner, B.L. 1978. Taxonomy of *Axiniphyllum* (Asteraceae: Heliantheae). Madrono 25: 46-52.

Turner, B.L. 1988. A new species of, and observations on, the genus *Smallanthus* (Asteraceae-Heliantheae). Phytologia 64: 405-409.



Fig. 1. Smallanthus putlanus (holotype).

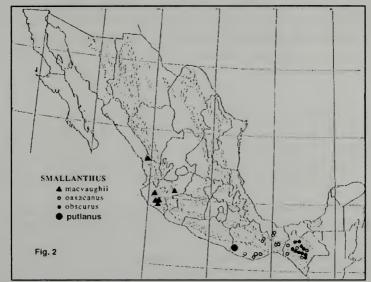


Figure 2. Distribution of Smallanthus species in Mexico.



Figure 3. Distribution of Smallanthus uvedalius in Mexico.